

PATENT SPECIFICATION

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PROVISIONAL SPECIFICATION

An Improved Wrapping Device for an Annular Package

We, W. T. HENLEY'S TELEGRAPH WORKS COMPANY LIMITED, a British Company, of Milton Court, Westcott, Dorking, Surrey, and CHARLES ARCHER WALKER, a British Subject, of 192, Osborne Road, Forest Gate, London, E.7, do hereby declare the nature of this invention to be as follows:—

- 10 This invention relates to an improved form of wrapper suitable for an annular package, for instance for a coil of electric insulated wire or rubber tube. The improved wrapper is readily and cheaply manufactured. It is easily applied to the package and may be made in such a form that it can be used repeatedly if required.

- 20 This wrapper is in the form of a strip which is to be applied to the package by bending it round the outer circumference of the article and securing it thereon by a binder. The strip has a continuous central part and side pieces projecting from each edge. These side pieces are 25 attached to, and preferably integral with, the centre part and are sufficiently separate from each other to avoid impeding the bending of the centre part round the article to be enclosed. They are also 30 adapted to bend so as to lie upon the sides and inner circumference of the article and complete the package by covering these parts.

- 35 The wrapper may be made from a single piece of material in the form of a long broad strip by making a number of parallel transverse cuts from each side edge towards the centre, leaving a central uncut strip. The cuts may be made 40 with parallel edges, either close together or separated by a short distance, or may be of narrow V-shape. The wrapper may be kept flat until required for use, but

may, with advantage, be given a preliminary creasing or bending of the side 45 pieces so that when the centre part is bent round the outside of the package the side pieces tend to bend inwards and lie along the sides of the package.

The wrapper may be made of any sufficiently strong and flexible material 50 appropriate for the purpose of a wrapper. Thin sheet metal may be used, but, in general, it is preferred to employ non-metallic material such as fibre board, or 55 stout paper.

In applying the wrapper to a package, the centre portion of the strip is placed around the outer circumference of the article and is bent over this until the two 60 ends come together completing the circle. As the bending of the central part proceeds, the side pieces are also bent inwards round the sides of the article and on to the inner circumference thereof. 65 Each side piece as it comes down on to the article overlaps the adjacent part of the preceding side piece and holds this latter in place thus ensuring that the 70 parts of the package make a close covering of the article which only requires to be secured at one or a few points by a binder. To avoid the use of a binder, or to reinforce the securing action, the outer 75 ends of the side pieces may be made adhesive so that they stick together when overlapped on the inner circumference of the package.

The strip can be made in long lengths and kept in a coil or otherwise and cut 80 off as required to suit the package.

Dated this 23rd day of January, 1940.

R. L. CLEAVER,
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COMPLETE SPECIFICATION

An Improved Wrapping Device for an Annular Package

We, W. T. HENLEY'S TELEGRAPH WORKS COMPANY LIMITED, a British Company, of Milton Court, Westcott, Dorking, Surrey, and CHARLES ARCHER 85 WALKER, a British Subject, of 192, Osborne Road, Forest Gate, London, E.7,

[Price 1/-]

Price 2s. 6d.

do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described 90 and ascertained in and by the following statement:—

This invention relates to an improved

form of wrapper suitable for an annular package, for instance, for a coil of electric insulated wire or rubber tube. The improved wrapper is readily and cheaply manufactured. It is easily applied to the package and may be made in such a form that it can be used repeatedly if required.

This wrapper, which is adapted to form an annular enclosure for an article of that shape, consists of a strip of flexible material having a continuous central part and a number of side pieces projecting from that part separated from each other by narrow cuts or gaps and being otherwise unconnected. The side pieces are so dimensioned that those projecting from one side of the continuous central part overlap those projecting from the other side on the central part when the central part is bent round the outer circumference of the article to be wrapped and the side pieces bent to cause them to lie against the sides and the inner circumference of the article.

One convenient form of construction of wrapper in accordance with the invention is shown, by way of example, in the accompanying drawings, wherein:—

Figure 1 is a plan view of the wrapper,

Figure 2 is a side elevation showing an annular article with the wrapper applied thereto, the wrapper being shown broken away and,

Figure 3 is a sectional plan view of the article and wrapper taken on the line III—III of figure 2 and looking in the direction of the arrows shown.

Referring to figure 1, the wrapper consists of a flexible strip 1 having a continuous central part 2 from the edges 4 of which project laterally a number of outwardly tapering side pieces 3. These side pieces may be formed by cutting the edges 8 to form oblique cuts extending inwards from those edges and terminating at the side edges 4 so that a series of triangular pieces may be removed to form a number of narrow V-shaped gaps or slots 5 between adjacent side pieces 3, the apices of the V's lying on the side edges 4 and the longitudinal axes of the V's being at right angles to the edges 8 and 4 of the grip 1.

It will be understood that the dimensions of the strip and of the parts 2 and 3 will depend upon the dimensions of the article to be covered. The strip, however, is intended to be folded around the article in such a manner that the central part 2 just covers the outer circumference of the article as regards the width of the latter, the central part being sufficiently long to permit the ends of that part to meet or to overlap by a small amount. By

employing a strip having the appropriate width for the central part 2 the side pieces 3 can be creased along the edges 4 and be bent so as to lie against the sides of the article and by selecting an appropriate length for the side pieces each of the latter can be made to cover a portion of one side of the article and also to extend across the inner circumference from one edge thereof to a point close to the opposite edge.

The wrapper can be applied to the article, for example, a coil 6 of wire (figures 2 and 3) by applying the central part 2 to the outer circumference of the coil, the ends being overlapped and fixed together by the use of an adhesive. The side pieces 3 can then be bent to cause them to lie against the sides of the coil and on the inner circumference of the latter. This can be effected by bending one of the side pieces into position and then bending the corresponding side piece on the other side of the central part 2 into position, the latter overlapping the first side piece. One pair of the adjacent pairs of side pieces can then be treated in a similar manner and the bending of the side pieces continued around the outer and inner circumferences of the coil until the last pair of side pieces have been placed in position. By working round the coil always in the same direction and providing comparatively narrow gaps between the side pieces it can be arranged that one pair of side pieces overlaps an adjacent pair which has already been bent into position. It follows, therefore, that under these conditions each pair of side pieces, except the last to be bent into position, is held in place by the adjacent succeeding pair of side pieces. The last pair of side pieces to be bent into position may be secured in place by a suitable binder (not shown) or with the aid of adhesive or by both means. Where it is desired to avoid the use of a binder or to reinforce the securing action, the outer edges 8 of the side pieces 3 may have an adhesive 7 applied to them so that the oppositely disposed side pieces constituting a pair may be stuck together after they have been bent into position.

By employing separated side pieces, their bending into position after the central part 2 has been placed in position around the outer circumference of the articles, is facilitated. By employing narrow gaps between adjacent side pieces, the overlapping described above can be obtained. By using inwardly tapering gaps between adjacent side pieces, the width of each side piece is less at its outer edge than at its base. This facilitates the placing of the side pieces on the inner

circumference of the article being wrapped. It is intended that the overlapping of adjacent side pieces should extend from the outer to the inner circumference as well as from the latter on one side of the coil to a point close to the opposite side. Figure 2 illustrates the overlapping of adjacent side pieces at one side of the coil 6 and Figure 3 the overlapping on one half of the inner circumference of the coil.

By using a flexible strip of the appropriate dimensions, the article can be completely enclosed by the wrapper.

The gaps 5 need not necessarily be V-shaped but the cuts made in the edges 4 may have parallel edges which may be either close together or separated by a short distance.

The wrapper may be kept flat until required for use, but may, with advantage, be given a preliminary creasing or bending of the side pieces so that when the centre part is bent round the outside of the package the side pieces tend to bend inwards and lie along the sides of the package. The preliminary creasing or bending may also be such as to facilitate the subsequent bending of the side pieces at the edges of the inner circumference of the package.

The wrapper may be made of any sufficiently strong and flexible material appropriate for the purpose of a wrapper. Thin sheet metal may be used, but, in general, it is preferred to employ non-metallic material such as fibre board, or stout paper.

The strip can be made in long lengths and kept in a coil or otherwise and cut off as required to suit the package.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is:—

1. A wrapper adapted to form an annular enclosure for an article of that shape, comprising a strip of flexible material having a continuous central part and a number of side pieces projecting from that part separated from each other by narrow cuts or gaps and being otherwise unconnected, the side pieces being so dimensioned that those projecting from one side of the continuous

central part overlap those projecting from the other side of the central part when the central part is bent round the outer circumference of the article to be wrapped and the side pieces bent to cause them to lie against the sides and the inner circumference of the article.

2. A wrapper adapted to form an annular enclosure for an article of that shape, comprising a strip of flexible material having a continuous central part and a number of side pieces projecting therefrom separated from each other by narrow cuts or gaps and being otherwise unconnected, the side pieces being so dimensioned that those on one side of the central part overlap those on the other side when the wrapper is applied to the article and the latter enclosed thereby, wherein the side pieces and the gaps or cuts between them are so dimensioned that upon applying the central part to the outer circumference of the article and bending the side pieces successively to cause them to lie against the sides and the inner circumference of the article, those portions of adjacent side pieces on each side of the article lying against the inner circumference overlap, so that when the wrapping of the article has been completed a binder at one place suffices to hold the wrapper in the closed position.

3. A wrapper adapted to form an annular enclosure for an article of that shape, comprising a strip of flexible material having a continuous central part and a number of side pieces projecting therefrom separated from each other by narrow cuts or gaps and being otherwise unconnected, the side pieces being so dimensioned that those on one side of the central part overlap those on the other side when the wrapper is applied to the article and the latter enclosed thereby, wherein the outer ends of the side pieces are made adhesive so that they can be stuck together after being bent over the inner circumference of the article being wrapped.

Dated this 23rd day of January, 1941.

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[This Drawing is a reproduction of the Original on a reduced scale.]

